ASAP

Work Order ID 109950

December-09-13 12:53:10 PM

109950 ~~PRELIMINARY ISSUE~~

Rev A Dy 13/12/13

Item ID: D4918-047 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: ~~PRELIM~~ **Stop** *NS2*

Item Name: Wearplate Assembly

Start Date: 12/09/13 **Start Qty:** 4.00 *4*

Required Date: 12/23/13 **Req'd Qty:** 4.00 *4*

Reference:

Cust Item ID:

Customer:

Approvals: **Process Plan:** MLJ **Date:** 13-12-09 **Tooling:** _____ **Date:** _____

QC: ~~MLJ~~ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	DAS 27 ~~9-89~~	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	**Revision Nbr**	Rev A								
D4918	~~PA2~~									
100			0.00							
100							4	0		Ae 13.12.11
Waterjet	**Memo**	Dwg D4918-7	0.00							
FLOW CNC Waterjet	CUT AS PER ~~FILE D4918-1~~									
	PROG REV: ~~PA5~~ PA2									
	DWG REV: ~~PA~~ PA2									
	DEBURR									
105	QC2- Inspect parts off machine FAI/FAIB		0.00							
105							4	0		Ae 13.12.11
QC	**Memo**		0.00							
Quality Control										

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

- Rework ☐
- Scrap ☐
- Use-as-is ☐
- Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐
Machining ☐	Small Fab ☐	Prod. Eng. Coor. ☐	Quality ☐
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐
Large Fab ☐	Composite ☐	Supplier ☐	

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

- ☐ Bending
- ☐ Centre Not Concentric
- ☐ Cracks
- ☐ Crimp/Kink/Ripple/Wave
- ☐ Cuffs
- ☐ Crushing
- ☐ Heat Treat
- ☐ Inspection Strip in Tube
- ☐ Marks/Chatter
- ☐ Turning Sequence
- ☐ Wave/Twist in Tube

General

- ☐ Bend
- ☐ BOM/Route
- ☐ Broken/Damage/Defect
- ☐ Burrs
- ☐ Contamination
- ☐ Countersink
- ☐ Cut Too Short
- ☐ Drawing
- ☐ Drill Holes
- ☐ Finish
- ☐ Fit/Function
- ☐ Folio/Program
- ☐ Grain
- ☐ Hardware
- ☐ Inspection Incomplete/Unqualified
- ☐ Instructions Incomplete/Unclear
- ☐ Misaligned/off center
- ☐ Mislabeled
- ☐ Misread
- ☐ Off-set
- ☐ Out of Calibration
- ☐ Out of Sequence
- ☐ Outside Dimensions
- ☐ Over/Under tolerance
- ☐ Part Incorrect
- ☐ Part Lost/Missing
- ☐ Part Moved
- ☐ Positioned Wrong
- ☐ Power Loss/Surge
- ☐ Pressure/Forced
- ☐ Set-up
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other

Item ID: D4918-047
Revision ID: PRELIM
Item Name: Wearplate Assembly

Accept *N900040100*

Setup Start *NS1*
Stop *NS2*

Start Date: 12/09/13 **Start Qty:** 4.00 *4*
Required Date: 12/23/13 **Req'd Qty:** 4.00 *4*
Reference:

Cust Item ID:
Customer:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run Start *NR1*
Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
107 *107* QC Quality Control	QC8- Inspect parts - second check	0.00 SM 8/12/11				4			
	Memo	0.00			Inspect as per Dwg PAD				
108 *108* Brake NC Brake NC	Form as per dwg	0.00		DAS 30 9-89		4			13/12/11
	Memo	0.00							
109 *109* QC Quality Control	QC5- Inspect part completeness to step on W/O	0.00 DAS 27 9-89 8/12/16				4			
	Memo	0.00			Inspect as per Dwg PAD				

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

☐ Bending
☐ Centre Not Concentric
☐ Cracks
☐ Crimp/Kink/Ripple/Wave
☐ Cuffs
☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

General

☐ Bend
☐ BOM/Route
☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
☐ Drill Holes
☐ Finish
☐ Fit/Function
☐ Folio/Program
☐ Grain
☐ Hardware
☐ Inspection Incomplete/Unqualified
☐ Instructions Incomplete/Unclear
☐ Misaligned/off center
☐ Mislabeled
☐ Misread
☐ Off-set
☐ Out of Calibration
☐ Out of Sequence
☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge
☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other

Item ID: D4918-047 **Accept** *N900040100* **Setup Start** *NS1*
Revision ID: PRELIM **Stop** *NS2*
Item Name: Wearplate Assembly

Start Date: 12/09/13 **Start Qty:** 4.00 *4*
Required Date: 12/23/13 **Req'd Qty:** 4.00 *4*
Reference:

Cust Item ID:
Customer:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run Start *NR1*
Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120		0.00							
120						4		13-12-16	MAL
Large Fab	**Memo**	0.00							
Large Fab	1- Weld hardcoat on as per dwg A/R 2059b hardcoat Batch#: M127456								
130	QC9- Inspect visual per QSI004- Fusion Welds	0.00							
130						(9)	13-12-17		DAS 9 ~~9-89~~
QC	**Memo**	0.00							
Quality Control									
140	QC5- Inspect part completeness to step on W/O	0.00							
140						(1)	13-12-17		DAS 9 ~~9-89~~
QC	**Memo**	0.00							
Quality Control									

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

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DISPOSITION

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Scrap ☐
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AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

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☐ Drill Holes
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☐ Folio/Program
☐ Grain
☐ Hardware
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☐ Outside Dimensions
☐ Over/Under tolerance
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☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge
☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other

Item ID: D4918-047 **Accept** *N900040100* **Setup Start** *NS1*
Revision ID: PRELIM **Stop** *NS2*
Item Name: Wearplate Assembly

Start Date: 12/09/13 **Start Qty:** 4.00 *4*
Required Date: 12/23/13 **Req'd Qty:** 4.00 *4*
Reference:

Cust Item ID:
Customer:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run Start *NR1*
Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150		0.00							
150						4	Ø	Ø	AR 13-12-19
Small Fab	**Memo**	0.00							
Small Fab	Apply Rockguard on entire concave surface as per dwg A/R Rockguard Batch: 125335								
160	QC5- Inspect part completeness to step on W/O	0.00							
160						4			DAS QC 13-12-19
QC	**Memo**	0.00							
Quality Control									
170	Identify as per dwg & Stock Location: / Shipped	0.00							
170									
Packaging	**Memo**	0.00							
Packaging									

mm 13-12-19

B110141

POSITIVE RECALL AUTH DATE

MEL

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework	☐
Scrap	☐
Use-as-is	☐
Suspected Unapproved	☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐
Machining ☐	Small Fab ☐	Prod. Eng. Coor. ☐	Quality ☐
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐
Large Fab ☐	Composite ☐	Supplier ☐	

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
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FAULT CATEGORY

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Item ID: D4918-047
Revision ID: PRELIM
Item Name: Wearplate Assembly
Accept *N900040100*
Setup Start *NS1*
Stop *NS2*

Start Date: 12/09/13 **Start Qty:** 4.00 *4*
Required Date: 12/23/13 **Req'd Qty:** 4.00 *4*
Reference:
Cust Item ID:
Customer:

Run Start *NR1*
Stop *NR2*

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180	QC21- Final Inspection - Work Order Release	0.00							
180 QC Quality Control	Memo	0.00					RM	13/12/30	

MA 13-12-20

POSITIVE RECALL
EFFECTIVE 13.12.09 AUTH
RELEASED S DATE 13/12/20

Release Dwg as per Dwg Rev A

9-89 27 DAS 13/12/20

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

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Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

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Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

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☐ Hardware
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☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge
☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other

Picklist Print

December-09-13 12:53:16 PM

Work Order ID: 109950 *109950*

Parent Item: D4918-047 *D4918-047*

Parent Item Name: Wearplate Assembly

Start Date: 12/09/13 **Required Date:** 12/23/13

Start Qty: 4.00 **Required Qty:** 4.00

Comments: IPP REV:A 13.11.01 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
~~M304S16GA~~ *~~M304S16GA~~* ~~304/316 Sheet .063~~		Purchased	No			100	sf	210.6540	0.412 **	~~2~~			

OK

Location	Loc Qty	Loc Code
MAT020	210.6539998	
123136	140.2	
M126159	25.94	
M126915	44.514	

126915 → (2)

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

- Rework ☐
- Scrap ☐
- Use-as-is ☐
- Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐
Machining ☐	Small Fab ☐	Prod. Eng. Coor. ☐	Quality ☐
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐
Large Fab ☐	Composite ☐	Supplier ☐	

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

- ☐ Bending
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- ☐ Cuffs
- ☐ Crushing
- ☐ Heat Treat
- ☐ Inspection Strip in Tube
- ☐ Marks/Chatter
- ☐ Turning Sequence
- ☐ Wave/Twist in Tube

General

- ☐ Bend
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- ☐ Countersink
- ☐ Cut Too Short
- ☐ Drawing
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- ☐ Folio/Program
- ☐ Grain
- ☐ Hardware
- ☐ Inspection Incomplete/Unqualified
- ☐ Instructions Incomplete/Unclear
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- ☐ Mislabeled
- ☐ Misread
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- ☐ Out of Sequence
- ☐ Outside Dimensions
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- ☐ Part Incorrect
- ☐ Part Lost/Missing
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- ☐ Positioned Wrong
- ☐ Power Loss/Surge
- ☐ Pressure/Forced
- ☐ Set-up
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other

DART AEROSPACE LTD	Work Order:	109950
Description: WEARPLATE ASSEMBLY	Part Number:	4918-7
Inspection Dwg: 4918 Rev: B PA2		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
16.25	+/- .030	16.25	-		T	JKm-06
6.875	+/- .010	6.875	-		T	
3.65	+/- .030	3.65	-		V	JKm-05
2.860	+/- .010	2.860	-		V	
2.130	+/- .010	2.130	-		V	
2.06	+/- .030	2.05	-		V	
~~.600 x .600~~	~~+/- .010~~					
.300 x .300	+/- .010	.300 x .300	-		V	

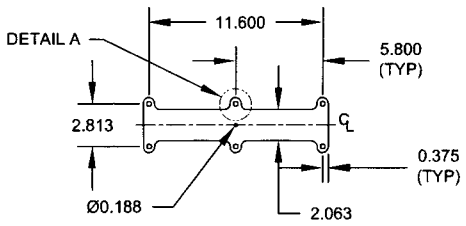
Measured by:	AE
Date:	13.12.11

Audited by:	SMD
Date:	13 12 11

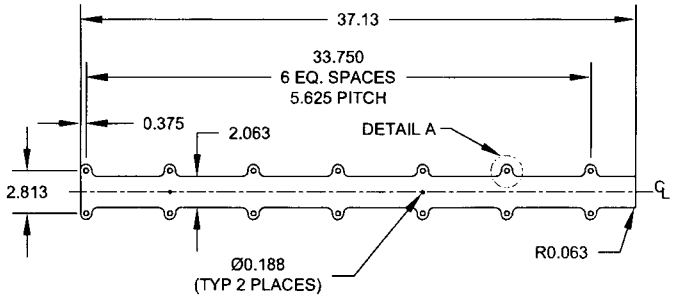
Preliminary Approval:	
Date:	

Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

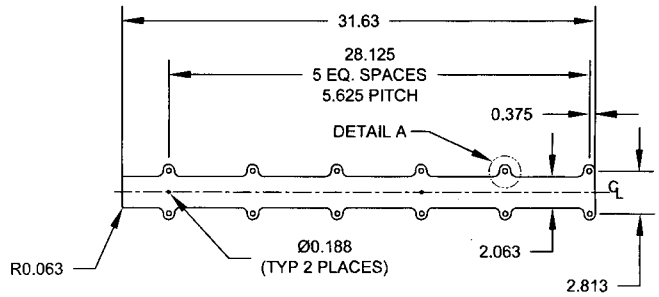
10.04.15



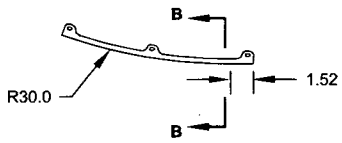
D4918-1 FLAT PATTERN



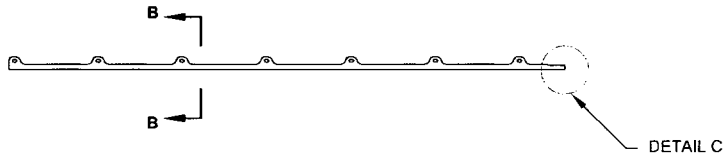
D4918-3 FLAT PATTERN



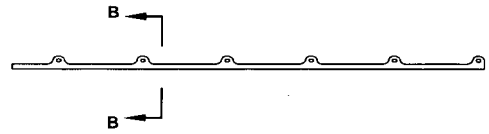
D4918-5 FLAT PATTERN



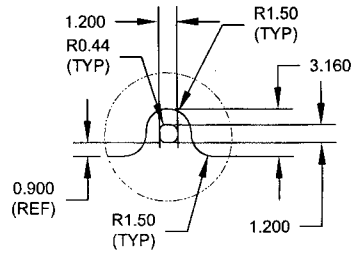
D4918-1 BENDING DETAIL
(MAKE FROM D3508-1F)



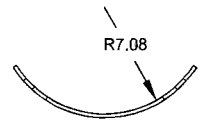
D4918-3 BENDING DETAIL
(MAKE FROM D3508-3F)



D4918-5 BENDING DETAIL
(MAKE FROM D3508-5F)



DETAIL A
(SCALE 2:3)



SECTION B-B
(SCALE 2:3)

NOTES:

1) MATERIAL: AISI 304/316 SS SHEET PER AMS 5513 OR AMS 5524, 20 GAUGE (0.038 THICK)
(REF. DART MATERIAL SPEC M304S20GA)
2) FINISH: POWDER COAT GREY SANDTEX (4.3.5.6) PER DART QSI 005 4.3
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: NONE
7) WEIGHT: D4918-1 - 0.47 lbs, D4918-3 - 0.95 lbs, D4918-5 - 0.77 lbs,

8) WELD PER DART QSI 004
9) COAT ENTIRE TOP (CONCAVE) SURFACE WITH PLUS ONE ROCKGUARD 4715A, 0.020-0.040 THK

1 09950 MLJ
13-12-09

REV.	DESCRIPTION	BY	DATE
A	NEW ISSUE	DW	13.08.30

DESIGN	DW	**DART AEROSPACE LTD**	
DRAWN	DW	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. PA2
MFG. APPR.		D4918	SHEET 1 OF 3
APPROVED		TITLE	SCALE
DE APPR.		WEARPLATE	1:1
DATE	13.08.30		

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DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

- Rework ☐
- Scrap ☐
- Use-as-is ☐
- Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

- Skid-tube ☐
- Machining ☐
- Thermoforming ☐
- Large Fab ☐
- Crosstube ☐
- Small Fab ☐
- Finishing ☐
- Composite ☐
- Water Jet ☐
- Prod. Eng. Coor. ☐
- Rec/Store/Packaging ☐
- Supplier ☐
- Engineering ☐
- Quality ☐
- Other ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

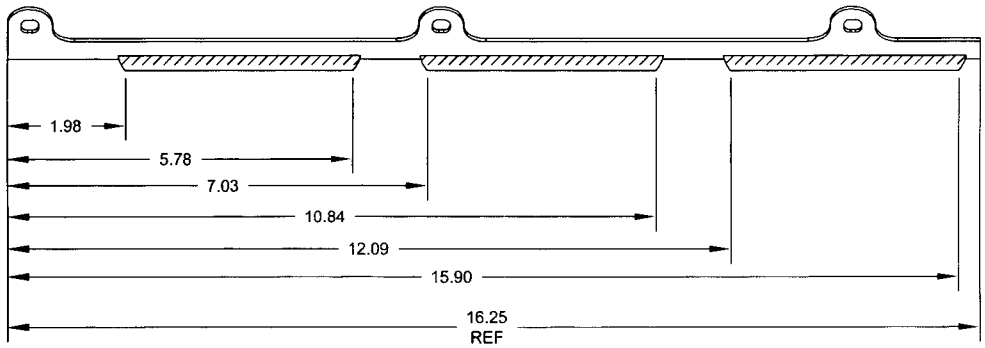
FAULT CATEGORY

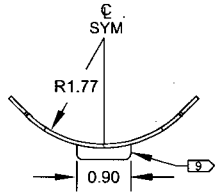
Landing Gear

- ☐ Bending
- ☐ Centre Not Concentric
- ☐ Cracks
- ☐ Crimp/Kink/Ripple/Wave
- ☐ Cuffs
- ☐ Crushing
- ☐ Heat Treat
- ☐ Inspection Strip in Tube
- ☐ Marks/Chatter
- ☐ Turning Sequence
- ☐ Wave/Twist in Tube

General

- ☐ Bend
- ☐ BOM/Route
- ☐ Broken/Damage/Defect
- ☐ Burrs
- ☐ Contamination
- ☐ Countersink
- ☐ Cut Too Short
- ☐ Drawing
- ☐ Drill Holes
- ☐ Finish
- ☐ Fit/Function
- ☐ Folio/Program
- ☐ Grain
- ☐ Hardware
- ☐ Inspection Incomplete/Unqualified
- ☐ Instructions Incomplete/Unclear
- ☐ Misaligned/off center
- ☐ Mislabeled
- ☐ Misread
- ☐ Off-set
- ☐ Out of Calibration
- ☐ Out of Sequence
- ☐ Outside Dimensions
- ☐ Over/Under tolerance
- ☐ Part Incorrect
- ☐ Part Lost/Missing
- ☐ Part Moved
- ☐ Positioned Wrong
- ☐ Power Loss/Surge
- ☐ Pressure/Forced
- ☐ Set-up
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other





D4918-047 WEARPLATE

NOTES:

1) MATERIAL: PER PARTS LIST
2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4918-047" PER QSI 044 6.1
7) WEIGHT: 2.18 lbs
8) WELD PER QSI 004
9) APPLY 2 LAYERS OF 2059B HARDCOAT WELDS TO WITHIN 0.25 OF WEARPAD ENDS 0.19 TO 0.25 THICK UNLESS OTHERWISE INDICATED
10) COAT ENTIRE TOP (CONCAVE) SURFACE WITH PLUS ONE ROCKGUARD 4714, 0.020-0.040 THK

DESIGN	DW	**DART AEROSPACE LTD**	
DRAWN	DW	**HAWKESBURY, ONTARIO, CANADA**	
CHECKED		DRAWING NO.	REV. PA2
MFG. APPR.		D4918	SHEET 2 OF 3
APPROVED		TITLE	SCALE
DE APPR.		WEARPLATE	NTS
DATE	13.08.30		

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DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

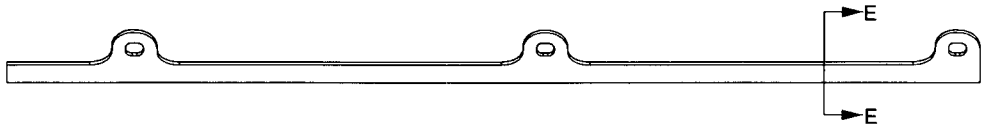
FAULT CATEGORY

Landing Gear

☐ Bending
☐ Centre Not Concentric
☐ Cracks
☐ Crimp/Kink/Ripple/Wave
☐ Cuffs
☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

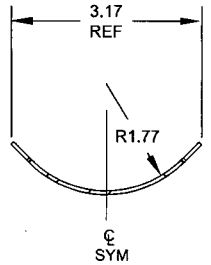
General

☐ Bend
☐ BOM/Route
☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
☐ Drill Holes
☐ Finish
☐ Fit/Function
☐ Folio/Program
☐ Grain
☐ Hardware
☐ Inspection Incomplete/Unqualified
☐ Instructions Incomplete/Unclear
☐ Misaligned/off center
☐ Mislabeled
☐ Misread
☐ Off-set
☐ Out of Calibration
☐ Out of Sequence
☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge
☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other



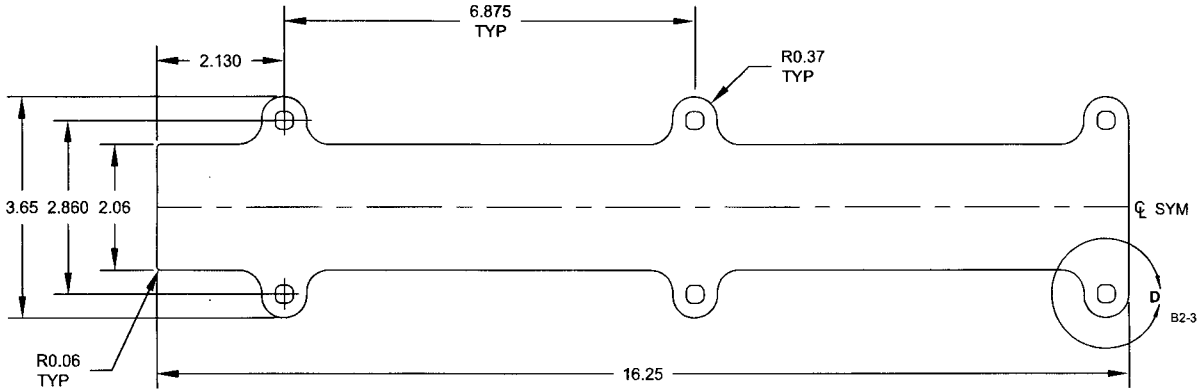
D4918-7 WEARPLATE
(MAKE FROM D4918-7F)

D2-3

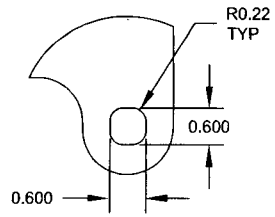


SECTION E-E
SCALE 2X

D4-3



D4918-7F WEARPLATE
FLAT PATTERN



DETAIL D
SCALE 2X

B4-3

NOTES:
1) MATERIAL: AISI 304/316 STAINLESS STEEL PER AMS 5513 OR AMS 5524, 16 GAUGE (0.063 THICK), (REF. DART SPEC. M304S16GA)
2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: NONE
7) WEIGHT: 0.66 lbs

DESIGN	DW	**DART AEROSPACE LTD**	
DRAWN	DW	**HAWKESBURY, ONTARIO, CANADA**	
CHECKED		DRAWING NO.	REV. PA2
MFG. APPR.		D4918	SHEET 3 OF 3
APPROVED		TITLE	SCALE
DE APPR.		WEARPLATE	NTS
DATE	13.08.30		

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DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

- Rework ☐
- Scrap ☐
- Use-as-is ☐
- Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐
Machining ☐	Small Fab ☐	Prod. Eng. Coor. ☐	Quality ☐
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐
Large Fab ☐	Composite ☐	Supplier ☐	

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

- ☐ Bending
- ☐ Centre Not Concentric
- ☐ Cracks
- ☐ Crimp/Kink/Ripple/Wave
- ☐ Cuffs
- ☐ Crushing
- ☐ Heat Treat
- ☐ Inspection Strip in Tube
- ☐ Marks/Chatter
- ☐ Turning Sequence
- ☐ Wave/Twist in Tube

General

- ☐ Bend
- ☐ BOM/Route
- ☐ Broken/Damage/Defect
- ☐ Burrs
- ☐ Contamination
- ☐ Countersink
- ☐ Cut Too Short
- ☐ Drawing
- ☐ Drill Holes
- ☐ Finish
- ☐ Fit/Function
- ☐ Folio/Program
- ☐ Grain
- ☐ Hardware
- ☐ Inspection Incomplete/Unqualified
- ☐ Instructions Incomplete/Unclear
- ☐ Misaligned/off center
- ☐ Mislabeled
- ☐ Misread
- ☐ Off-set
- ☐ Out of Calibration
- ☐ Out of Sequence
- ☐ Outside Dimensions
- ☐ Over/Under tolerance
- ☐ Part Incorrect
- ☐ Part Lost/Missing
- ☐ Part Moved
- ☐ Positioned Wrong
- ☐ Power Loss/Surge
- ☐ Pressure/Forced
- ☐ Set-up
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other

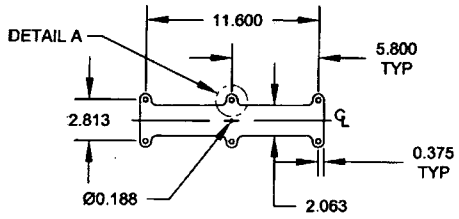
DART AEROSPACE LTD

Description:	Wedge plate	**Work Order:**	B 109950
Inspection Drawing:	D4918	Rev: PA2	Part Number: D4918-047

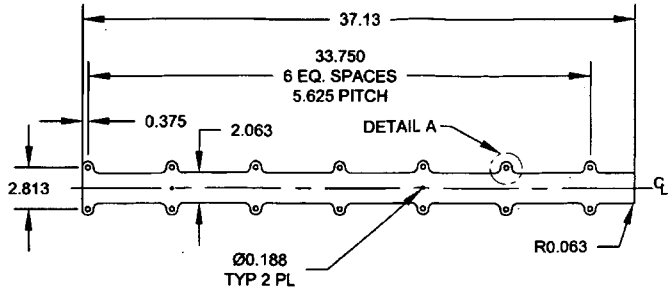
INSPECTION SHEET

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
R.177		R177				SYS for 8326

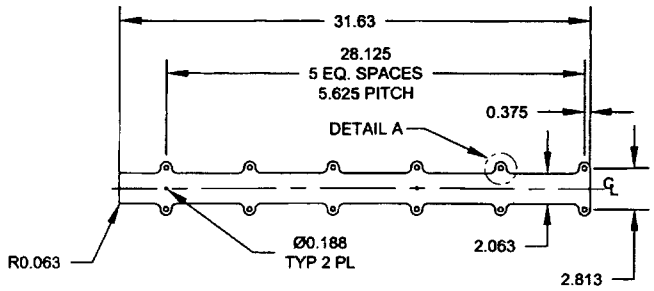
Measured by: DAS 30 9-89	Checked By: DAS 36 9-89	QC inspector:	Engineering Approval *(if necessary)*:
Date 13/12/11	Date 13/12/11	Date	Date



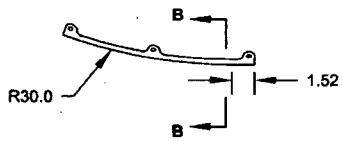
D4918-1F FLAT PATTERN



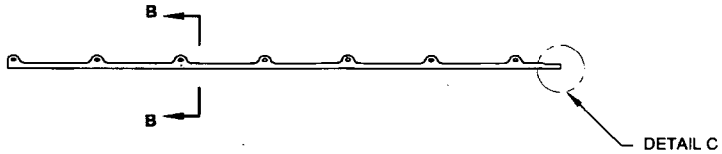
D4918-3F FLAT PATTERN



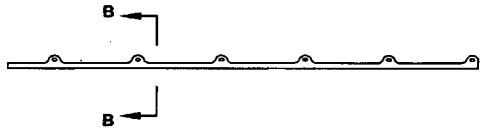
D4918-5F FLAT PATTERN



D4918-1 BENDING DETAIL
(MAKE FROM D4918-1F)

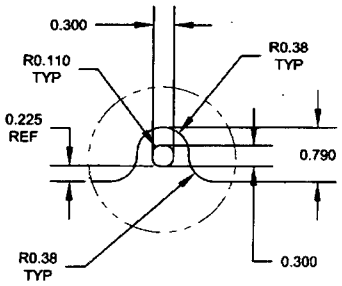


D4918-3 BENDING DETAIL
(MAKE FROM D4918-3F)

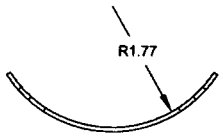


D4918-5 BENDING DETAIL
(MAKE FROM D4918-5F)

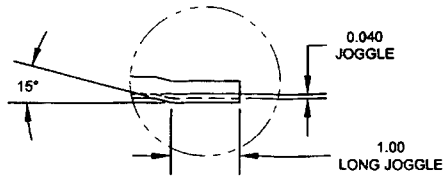
RELEASED
2013-12-10



DETAIL A
(SCALE 4X)



SECTION B-B
(SCALE 4X)



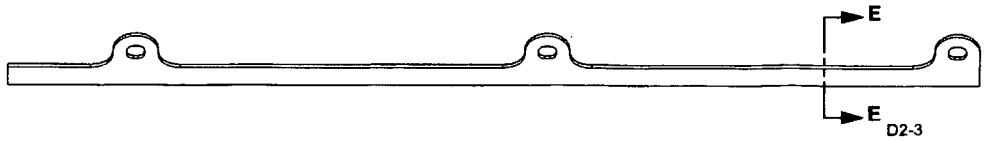
DETAIL C
(SCALE 4X)

NOTES:
1) MATERIAL: AISI 304/316 SS SHEET PER AMS 5513 OR AMS 5524, 20 GAUGE (0.038 THICK)
(REF. DART MATERIAL SPEC M304S20GA)
2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: NONE
7) WEIGHT: D4918-1 - 0.47 lbs, D4918-3 - 0.95 lbs, D4918-5 - 0.77 lbs,
8) COAT ENTIRE TOP (CONCAVE) SURFACE WITH PLUS ONE ROCKGUARD 4714, 0.020-0.040 THK

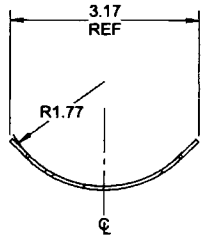
REV.	DESCRIPTION	BY	DATE
A	NEW ISSUE	DW	13.08.30

DESIGN	DW	DART AEROSPACE USA, INC KENT, WA
DRAWN	DW	
CHECKED		DRAWING NO. D4918 — REV. A — SHEET 1 OF 3
MFG. APPR.		
APPROVED		TITLE: WEARPLATE — SCALE: NTS
DE APPR.		
DATE	13.08.30	

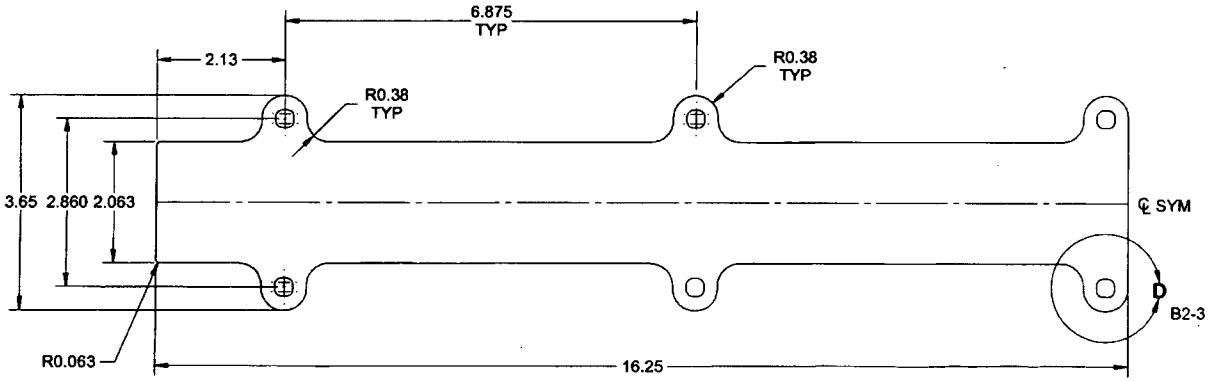
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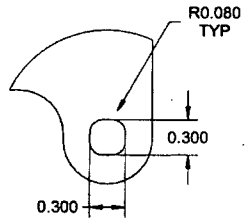
D4918-7 WEARPLATE
(MAKE FROM D4918-7F)



SECTION E-E
SCALE 2X D4-3



D4918-7F WEARPLATE
FLAT PATTERN



DETAIL D
SCALE 2X B4-3

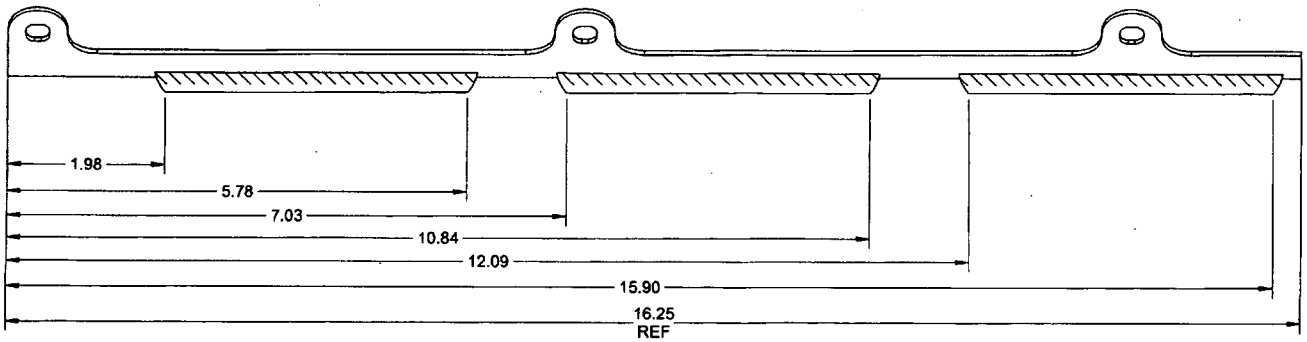
RELEASED
2013 -12- 13

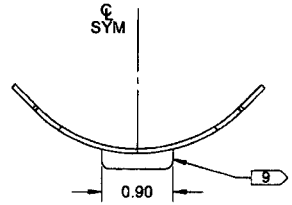
NOTES:
1) MATERIAL: AISI 304/316 STAINLESS STEEL PER AMS 5513 OR AMS 5524, 16 GAUGE (0.063 THICK), (REF. DART SPEC. M304S16GA)
2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: NONE
7) WEIGHT: 0.66 lbs

DESIGN	DW	DART AEROSPACE LTD	
DRAWN	DW	KENT, WA	
CHECKED		DRAWING NO. D4918	REV. A
MFG. APPR.			SHEET 3 OF 3
APPROVED		TITLE WEARPLATE	SCALE NTS
DE APPR.			
DATE 13.08.30			

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ITEM	QTY -047	P/N	DESCRIPTION
1	X	D4918-047	WEARPLATE
2	1	D4918-7	WEARPLATE
3	A/R	2059B	HARDCOAT





D4918-047 WEARPLATE

RELEASED
2013 -12- 10

NOTES:
1) MATERIAL: PER PARTS LIST
2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4918-047" PER QSI 044 6.1
7) WEIGHT: 2.18 lbs
8) WELD PER QSI 004
9) APPLY 2 LAYERS OF 2059B HARDCOAT WELDS TO WITHIN 0.25 OF WEARPAD ENDS 0.19 TO 0.25 THICK UNLESS OTHERWISE INDICATED
10) COAT ENTIRE TOP (CONCAVE) SURFACE WITH PLUS ONE ROCKGUARD 4714, 0.020-0.040 THK

DESIGN	DW	**DART AEROSPACE LTD** KENT, WA
DRAWN	DW	
CHECKED		DRAWING NO. D4918 REV. A
MFG. APPR.		SHEET 2 OF 3
APPROVED		TITLE WEARPLATE SCALE NTS
DE APPR.		
DATE	13.08.30	

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